APPENDIX D MITIGATION MONITORING PROGRAM

OVERVIEW

This Mitigation Monitoring Program was developed to ensure that mitigation measures included in the Mitigated Negative Declaration (MND) are fully implemented to reduce environmental impacts to a less than significant level. In addition, the Mitigation Monitoring Program (MMP) complies with the requirements of Public Resources Code 21081.6, which requires the lead agency to adopt a reporting or monitoring program.

The core of this MMP is the attached Implementation Table (Table D-1) listing mitigation measures from the project's MND, implementation timing, documentation required, and the agency responsible for monitoring. The California State Lands Commission (CSLC) will coordinate all hazard removal activities through the construction superintendent and supporting contractors. CSLC will also utilize engineering and environmental consultants to supervise project construction. This MMP is based on the following compliance actions:

- Oversight of construction activities
- Biological monitoring
- Archaeological monitoring

BIOLOGICAL MONITOR

A biological monitor will be designated by the CSLC to be onsite within the onshore and offshore portion of any project site at all times during project operation. The duties of the biological monitor will include, but not be limited to:

- 1. Become familiar with the intent of each mitigation measure of the MND.
- 2. Become familiar with this MMP.
- 3. Conduct surveys for sensitive avifauna (western snowy plover and California least tern) prior to the commencement of excavation activities within the onshore work.
- 4. Conduct the biological sensitivity briefing for construction employees.
- 5. Contact the construction superintendent each day to determine the work schedule.
- 6. Observe all work activities on a daily basis.
- 7. Issue stop work orders, if required, and ensure, in conjunction with CSLC staff, that non-compliance remedies are fully implemented.
- 8. Alert CSLC staff to situations requiring temporary shut-downs of the project due to sensitive species sightings.
- 9. Prepare daily reports.

10. Prepare draft and final reports for submittal to CSLC.

ARCHAEOLOGICAL MONITOR

An archaeological monitor will be designated by the CSLC to be onsite within the onshore portion of the project site at all required times during project operation. The duties of the archaeological monitor will include, but not be limited to:

- 1. Become familiar with the intent of each archaeological mitigation measure of the MND.
- 2. Become familiar with this MMP.
- 3. Conduct surveys in areas of sensitive archaeological resources prior to equipment being moved into the field.
- 4. Conduct the cultural resource sensitivity briefing for construction employees.
- 5. Coordinate with the construction superintendent each day to determine the work schedule.
- 6. Observe all work activities on a daily basis as required.
- 7. Issue stop work orders, if required, and ensure, in conjunction with CSLC staff, that non-compliance remedies are fully implemented.
- 8. Alert CSLC staff to situations requiring temporary shut-downs of the project due to cultural resource issues.
- 9. Prepare daily reports.
- 10. Prepare draft and final reports for submittal to CSLC.

Table D-1. Mitigation Monitoring Required by California State Lands Commission for Santa Barbara Channel Hazards Removal Program – Implementation Table

Mitigation Number	Mitigation Measure	Implementation Timing	Documentation Required	Agency Responsible
Biological Re	sources			
TBio-1	A qualified biologist shall be onsite to monitor the hazard removal sites. The level of monitoring conducted at each site will be dependent on the extent of sensitive resources within the applicable work site. The qualified biologist shall provide the following during project operations:	Throughout the construction period.	Biological Monitoring Sheet	CSLC
	Pre-construction surveys for special-status plant and wildlife species known or potentially existing within the work sites prior to commencing project activities in the area.			
	Conduct an employee orientation program for all project personnel; and			
	Monitor all construction activity within 100 feet of wetlands or other designated sensitive habitat areas.			
TBio-2	Protective fencing shall be installed temporarily around sensitive plant communities and/or other sensitive biological resources that could be impacted during hazard removal activities.	Throughout the construction period	Biological Monitoring Sheet and site photo logs.	CSLC
TBio-3	Work activities shall avoid breeding season (typically April 1-July1) of those sensitive species currently known to exist within or adjacent to the work sites or which are discovered during hazard removal activities.	Throughout the construction period	Site monitoring sheets.	CSLC

Table D-1. (Continued)

Mitigation Number	Mitigation Measure	Implementation Timing	Documentation Required	Agency Responsible
Biological Re	sources (Continued)			
TBio-4	To the extent feasible, the use of heavy equipment and vehicles shall be limited to existing roadways and defined staging areas/access points. The boundaries of each work area and staging area shall be clearly defined and marked with visible flagging or fencing.	Prior to the start of Project Construction Throughout the construction period	Review of Traffic Management and Access Plans. Biological Monitor- ing Sheet and site photo logs.	CSLC
TBio-5	During transportation of equipment, water trucks shall be used to prevent airborne particles from leaving the project site in addition to impacting monarch butterfly over-wintering habitat.	Throughout the construction period	Biological Monitoring Sheet and site photo logs.	CSLC
TBio-6	All project related equipment shall adhere to a 15 mph speed limit on-site.	Throughout the construction period	Biological Monitoring Sheet and site photo logs.	CSLC
TBio-7	To reduce inadvertent release of fuel from construction areas to aquatic habitats, all refueling will occur only within designated refueling areas located at least 100 feet from known wetlands. All nearshore ,i.e., within 100 ft of high tide line or within 100 ft of a coastal drainage, refueling and storage areas will be covered with an impervious material and surrounded by an earthen berm.	Prior to the start of Project Construction Throughout the construction period	Review of Traffic Management and Access Plans. Biological Monitor- ing Sheet and site photo logs.	CSLC
TBio-8	All areas that previously supported vegetation that are disturbed during work activities shall be replanted or reseeded with appropriate indigenous native or naturalized vegetation within a time period identified by the biologist to ensures greatest survival.	Prior to the start of Project Construction Throughout the construction period	Review of Grading and Erosion Control Plans. Biological Monitor- ing Sheet and site photo logs.	CSLC

Table D-1. (Continued)

Mitigation Number	Mitigation Measure	Implementation Timing	Documentation Required	Agency Responsible
Biological Re	sources (Continued)			
TBio-9	Erosion control measures shall be implemented as necessary to prevent sediment runoff in all disturbed areas. Measures may include installation of jute-netting, erosion control logs, and silt-fencing.	Prior to the start of Project Construction Throughout the construction period	Review of Grading and Erosion Control Plans. Biological Monitor- ing Sheet and site photo logs.	CSLC
MBio-1	Minimize the use of tracked vehicles; rubber tire vehicles should be used wherever possible.	Prior to the start of Project Construction Throughout the construction period	Review of Grading and Erosion Control Plans. Biological Monitor- ing Sheet and site photo logs.	CSLC
MBio-2	Keep all vehicles above the highest high tide line and on dry sand wherever possible. At no time during project operations will vehicles be allowed to traverse identified costal foredune habitat areas; traversing ice plant is acceptable, but minimize the area of impact by creating a temporary, minimal-width access route.	Prior to the start of Project Construction Throughout the construction period	Review of Grading and Erosion Control Plans. Biological Monitor- ing Sheet and site photo logs.	CSLC
MBio-3	Minimize the need to cross rock or boulder areas by planning beach access sites as close to the hazard site as possible and in areas where sand is present along the route from access point to hazard site.	Prior to the start of Project Construction Throughout the construction period	Review of Grading and Erosion Control Plans. Biological Monitor- ing Sheet and site photo logs.	CSLC
MBio-4	Complete mid- and low-intertidal (from +0.0 to -1.0 ft, MLLW) hazard removal during winter low tide periods and avoid disturbance of surf grass and rock habitat areas by minimizing the width of the work area corridor.	Prior to the start of Project Construction Throughout the construction period.	Review of Grading and Erosion Control Plans. Biological Monitor- ing Sheet and site photo logs.	CSLC

Table D-1. (Continued)

Mitigation Number	Mitigation Measure	Implementation Timing	Documentation Required	Agency Responsible
Biological Re	sources (Continued)			
MBio-5	MBio-5 Access site by traversing the beach in a straight line from the highest high tide line to the lowest; do not "cut across" the beach, particularly in rocky habitat areas.	Prior to the start of Project Construction	Review of Grading and Erosion Control Plans.	CSLC
		Throughout the construction period	Biological Monitor- ing Sheet and site photo logs.	
MBio-6	"Sidecast" and store excavated sand inshore (higher on the beach) and above the highest	Prior to the start of Project Construction	Review of Grading and Erosion Control Plans.	CSLC
	predicted tide for the day. Refill holes with excavated material and remove all material and vehicles at the end of each day.	Throughout the construction period	Biological Monitoring Sheet and site photo logs.	
MBio-7	If vehicles traveling from the access point to the site(s) cannot avoid rocky intertidal habitats, use temporary wooden or steel sheets	Prior to the start of Project Construction	Review of Grading and Erosion Control Plans.	CSLC
	to "ramp" the rocks. Sediment/sand should not be used to cover the rocky habitat. Onsite sand can be used to cover cobble (rocks 1 ft or less in diameter) habitats along the access to site corridor. Restrict the width of the route to the widest vehicle.	Throughout the construction period	Biological Monitor- ing Sheet and site photo logs.	
MBio-8	Locate access sites away from coastal streams wherever possible and utilize existing	Prior to the start of Project Construction	Review of Traffic Management and Access Plans.	CSLC
	bridges to cross. Avoid crossing or damming coastal streams that are flowing across the beach and prevent project-related discharges or trash to enter coastal streams.	Throughout the construction period	Biological Monitoring Sheet and site photo logs.	

Table D-1. (Continued)

Mitigation Number	Mitigation Measure	Implementation Timing	Documentation Required	Agency Responsible
Biological Re	sources (Continued)			
MBio-9	Avoid conducting work activities within or adjacent to designated marine mammal rookeries and beach-area bird nesting sites during active breeding periods. Schedule removal activities during periods of non-use by these species. To the extent feasible, establish a 500 ft buffer area around work areas in marine mammal haul out areas (removal activities should cease if marine mammals are observed within the buffer area).	Prior to the start of Project Construction Throughout the construction period	Review of Traffic Management and Access Plans. Biological Monitor- ing Sheet and site photo logs.	CSLC
MBio-10	Complete removal activities on grunion spawning beaches after mid-September and before early March. If activities must occur during the period between March and mid-September, consult with CDFG and prepare a grunion monitoring plan.	Throughout the construction period	Biological Monitoring Sheet and site photo logs.	CSLC
MBio-11	Conduct a pre-anchoring survey at all proposed offshore anchoring sites and re-locate any proposed anchor sites at least 20 ft away from rocky substrate, surf grass, eelgrass, or kelp beds	Prior to start of offshore anchoring activities	Review of pre- anchoring survey and final anchoring plan.	CSLC
MBio-12	Use crown buoys and near- surface anchor lines if rock substrate, surf grass, eelgrass, or kelp is between the anchor location and vessel.	Throughout offshore work period.	Biological Monitoring sheet and site photo log.	CSLC
MBio-13	Vessels requiring multiple anchors should deploy those anchors with an anchor-assist vessel; recover anchors vertically and avoid dragging anchors across the seafloor.	Throughout offshore work period.	Biological Monitoring sheet and site photo log.	CSLC

Table D-1. (Continued)

Mitigation Number	Mitigation Measure	Implementation Timing	Documentation Required	Agency Responsible
Biological Re	esources (Continued)			
MBio-14	Avoid traversing surface kelp areas when accessing nearshore and offshore hazard sites by vessel.	Throughout offshore work period.	Biological Monitoring sheet and site photo log.	CSLC
MBio-15	To the extent feasible, schedule offshore activities for periods other than grey whale migration seasons. All marine vessel operations shall be conducted in accordance with the procedures outlined in the Marine Wildlife Contingency Plan. Have an agency-approved marine mammal monitor onboard the vessel and provide him/her with the authority to cease operations if marine mammals are within 0.10 miles of the removal activity.	Review of Marine Wildlife Contingency Plan Throughout offshore work period.	Prior to start of offshore work. Biological Monitoring sheet and site photo log.	Carc
MBio-16	Have an oil spill response/recovery plan for all offshore operations that require petroleum products to be onboard. Train all onboard personnel on actions to be taken in the event of an oil spill.	Review and implementation and Oil Spill Contingency Plan.	Prior to start of offshore work.	CSLC
MBio-17	Minimize the number of anchors and the water depth-to-anchor line length ratio for offshore operations without jeopardizing the safety of the operations.	Prior to start of offshore anchoring activities Throughout offshore work period.	Review of pre- anchoring survey and final anchoring plan. Biological Monitoring sheet and site photo log.	CSLC

Table D-1. (Continued)

Mitigation Number	Mitigation Measure	Implementation Timing	Documentation Required	Agency Responsible
Cultural Reso	ources			
Cul-A,B,D-1	As the California Central Coast is a significant archaeological resource for the state, environmental monitors will exercise increase awareness with respect to archaeological materials at all hazard removal sites.	Prior to the start of Project Construction Throughout the construction period	Review of Traffic Management and Access Plans and Grading and Erosions Control Plans. Archaeological Monitoring Sheet and site photo logs.	CSLC
Cul- A,B,D-2	At all hazard removal sites and before commencing work, project crews and personnel shall be informed of the importance of the potential archaeological resources in the area and of the regulatory protections afforded to the resources. The crew should be informed of procedures relating to the discovery of archaeological remains during project activities and cautioned to avoid archaeological areas with equipment and not to collect artifacts. Personnel and the crew should inform their supervisor and the on-site monitor should cultural remains be uncovered.	Prior to the start of project activities	Briefing attendance sheet.	CSLC
Cul- A,B,D-3	Known archaeological sites shall be avoided, so as not to inflict a significant impact to the site. Avoidance can be accomplished by having the archaeologist and project engineer demarcate cultural resource boundaries on the ground to ensure that proposed project improvements do not impinge on the resource(s). Construction equipment can then be directed away from the resource, and construction personnel directed to avoid entering the area.	Prior to the start of Project Construction Throughout the construction period	Review of Traffic Management and Access Plans and Grading and Erosions Control Plans. Archaeological Monitoring Sheet and site photo logs.	CSLC

Table D-1. (Continued)

Mitigation Number	Mitigation Measure	Implementation Timing	Documentation Required	Agency Responsible
Cultural Reso	ources (Continued)			
Cul- A,B,D-4	Archaeological monitoring is required during project activities at these sites: Site No. 4: Ellwood West of VENOCO Ellwood Pier Site No. 5: Ellwood East of VENOCO Ellwood Pier Site No. 7: Santa Barbara Shores (B) Site No. 10: Isla Vista Site No. 18: Carpinteria State Beach Site No. 22: Ortega Hill, East Fernald Point Site No. 23: Rincon Point	Prior to the start of Project Construction Throughout the construction period	Review of Traffic Management and Access Plans and Grading and Erosions Control Plans. Archaeological Monitoring Sheet and site photo logs.	CSLC
Cul- A,B,D-5	At all hazard removal sites, if buried cultural resources, such as lithic debitage or groundstone, shell midden, historic debris, building foundations, or human bone, are discovered during ground-disturbing activities, work will stop in that area and within 100 feet of the find until the Project Archaeologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in accordance with the CSLC, the State Historic Preservation Officer (SHPO) and other appropriate agencies. Any non-burial cultural resource artifacts recovered will become the property of the Native Americans, with the disposition of the artifacts carried out as per the approved County Guidelines	Throughout the construction period.	Archaeological Monitoring Sheet and site photo logs.	CSLC

Table D-1. (Continued)

Mitigation Number	Mitigation Measure	Implementation Timing	Documentation Required	Agency Responsible
Cultural Reso	ources (Continued)			
Cul-A,B,D-6	At the Pauley Well site, fly-over anchoring and a pre-anchoring survey at all proposed offshore anchoring sites shall be conducted in order to avoid impacting any previously unidentified historic shipwrecks. Any proposed anchoring sites on or near a historic shipwreck shall be moved at least 20 feet away	Prior to start of offshore anchoring activities	Review of pre- anchoring survey and final anchoring plan.	CSLC
Cul- A,B,D-7	If Native American human remains are discovered during project construction at any hazard removal site, the Project Archaeologist shall be notified and state laws relating to the disposition of Native American burials, which fall within the jurisdiction of the NAHC (Pub. Res. Code Sec. 5097), shall be followed. The coordination of the procedures outlined in the Proposed Native American Burial Protection Plan is the responsibility and under the authority of the California State Lands Commission. In the event that human remains are unearthed, all work shall stop in the area of the find and any nearby area reasonably suspected to overlie adjacent human remains and the County Coroner notified. If the remains are determined to be of Native American descent, the Coroner shall notify the NAHC within 24 hours. Reburial or disposal of human remains shall be conducted according to the instructions of the most likely descendent, as identified by the NAHC.	Throughout the construction period.	Archaeological Monitoring Sheet and site photo logs.	CSLC

Table D-1. (Continued)

Mitigation Number	Mitigation Measure	Implementation Timing	Documentation Required	Agency Responsible
Geology and	Soils			
Geo-1	A grading and erosion control plan shall be prepared for all areas of active cut or fill activities. Recontouring/regarding of all disturbed areas shall match the surrounding terrain, including drainage links. The grading and erosion control plan shall be designed to minimize erosion and include:	Prior to the start of project work activities	Review of Grading and Erosion Control Plan.	CSLC
	Grading schematics with site specific diagrams and erosion control methods.			
	Graded areas shall be revegetated immediately following completion of hazard removal. Timing of revegetation may vary depending on vegetation areas and weather conditions.			
	Site specific detailed temporary erosion and sediment control plans shall be developed for all drainages and creeks and excavation areas with steep slopes.			
	Where appropriate, Geotextile binding fabrics or erosion control netting shall be required to hold slope soils until vegetation is established.			
	Straw bales, sedimentation fencing, soil compaction, water bars, trench plugs, baffle boards and trench drains shall be used to control erosion and revegetation			
	The plan shall include a post- construction inspection plan to inspect all areas of excavation and vegetation removal and, if necessary, repair areas of erosion.			

Table D-1. (Continued)

Mitigation Number	Mitigation Measure	Implementation Timing	Documentation Required	Agency Responsible	
Geology and Soils (continued)					
Geo-2	All beach excavations shall be backfilled with native materials to the extent feasible	Throughout the construction period	Daily Site Monitor- ing sheets and photo logs	CSLC	

Table D-1. (Continued)

Mitigation Number	Mitigation Measure	Implementation Timing	Documentation Required	Agency Responsible
Hazards and	Hazardous Materials			
Haz-1	Equipment staging areas shall be identified which are located at least 100 feet from any water body or wetlands. All staging, fueling, and maintenance of vehicles shall be conducted in designated staging areas. Equipment shall be provided with drip pans nightly to prevent soil contamination during periods of inactivity. The contractor shall maintain spill containment and clean-up materials on-site during the construction activities. Any soil contaminated by fuels or petroleum-based products shall be immediately removed and placed in DOT-approved drums and properly disposed in accordance with state and federal regulations.	Prior to the start of Project Construction Throughout the construction period	Review of Traffic Management and Access Plans and Grading and Erosions Control Plans. Daily Site Monitoring Sheet and site photo logs.	CSLC
Haz-2	All heavy equipment and supplies shall be removed from the beach each day. When equipment must be left on the beach overnight, it must be stored above the tide and will not block public use of the beach.	Throughout the construction period	Daily Site Monitoring Sheet and site photo logs.	CSLC

Table D-1. (Continued)

Mitigation Number	Mitigation Measure	Implementation Timing	Documentation Required	Agency Responsible
Noise				
N-1	Use of heavy equipment or other high noise producing tools, e.g., concrete breakers, and concrete saw, at the project site will be limited to the hours of 7:00 am to 5:00 pm. and will be restricted to Monday through Friday unless otherwise agreed to by the affected neighbors (It may be desirable to have longer construction hours if it would reduce the overall construction period duration).	Throughout the construction period	Daily Site Monitoring Sheet and site photo logs.	CSLC
N-2	Nearby residents will be given advanced written notification of construction activity scheduling and hours of construction.	Prior to start of project site work.	Copy of notification.	CSLC
N-3	Noise producing stationary equipment, e.g., generators, shall be shielded and located as far as possible from residences.	Throughout the construction period	Daily Site Monitor- ing Report	CSLC

Table D-1. (Continued)

Mitigation Number	Mitigation Measure	Implementation Timing	Documentation Required	Agency Responsible
Recreation				
Rec-1	All work areas will be clearly delineated by safety fencing and/or an on-site monitor will be present to direct individuals around the work area. Staging areas shall be located away from major recreation paths and clearly fenced during non-work hours.	Throughout the construction period	Daily Site Monitor- ing Report and photo logs	CSLC

Table D-1. (Continued)

Mitigation Number	Mitigation Measure	Implementation Timing	Documentation Required	Agency Responsible	
Transportation					
Trans C-1	A Traffic Management and Access Plan shall be prepared for each significant access area. These plans shall include, but not limited to, the following items:	Prior to construction activities, and maintained throughout construction period	Submission of Traffic Management and Access Plan	CSLC	
	A designated access route map and discussion.				
	A description and map for designed parking and staging areas.				
	Designation of flagmen and/or traffic control signage or measures.				
	Railroad crossing procedures including coordination requirements for Union Pacific Railroad permits.				